JC20, Rec'd PCT/PTO 2 9 MAR 2002

_			ATTO DAIENCE DOONET AHADED			
FORM (REV		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE OF TRANSMITTAL LETTER TO THE UNITED STATES	ATTORNEY'S DOCKET NUMBER®  TPP 31444			
	1.1	X .	U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR			
DESIGNATED OFFICE (DOLLOVO)						
		CONCERNING A FILING UNDER 35 U.S.C. 371	10/089306			
INTE		TIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/NO00/00319 28 September 2000	PRIORITY DATE CLAIMED  29 September 1999			
		INVENTION	")			
l D	EVIC	CE FOR CHILD SEAT IN A SHOPPER TROLLEY	,			
		NT(S) FOR DO/EO/US VIK, Dag Harald; and CRUICKSHANK, Arve				
	110 1	This bag Haraid, and excrementally, are				
Appl	icant l	t herewith submits to the United States Designated/Elected Office (DO/EO/US) the	e following items and other information:			
	Ø		Tonowing nems and other information			
1. 2.			r under 25 U.S.C. 271			
3.						
٠.		(9) and (24) indicated below.	57 (1)). The submission must include items (5), (6),			
4.	$\boxtimes$	The US has been elected by the expiration of 19 months from the priority date (	(Article 31).			
5.	$\boxtimes$	A copy of the International Application as filed (35 U.S.C. 371 (c) (2))				
		a 🛮 is attached hereto (required only if not communicated by the International Communicated Com	ional Bureau).			
b. 🖾 has been communicated by the International Bureau.						
		c. $\square$ is not required, as the application was filed in the United States Receiving Office (RO/US).				
6.						
		a.   1s attached hereto.				
,	IS71	b. has been previously submitted under 35 U.S.C. 154(d)(4).				
7.	Ø		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
		a. are attached hereto (required only if not communicated by the International Bureau).				
		<ul> <li>b.  have been communicated by the International Bureau.</li> <li>c.  have not been made; however, the time limit for making such amendments has NOT expired.</li> </ul>				
	<ul> <li>c.   have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d.   have not been made and will not be made.</li> </ul>					
8.		An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).				
9.		An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).				
10.		An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).				
11.	$\boxtimes$	•				
12.	$\boxtimes$					
I	Items 13 to 20 below concern document(s) or information included:					
13.						
14.		An assignment document for recording. A separate cover sheet in compliance v	with 37 CFR 3.28 and 3 31 is included.			
15.	$\boxtimes$	A FIRST preliminary amendment.				
16.		A SECOND or SUBSEQUENT preliminary amendment.				
17.		A substitute specification.				
18.		A change of power of attorney and/or address letter.				
19.		A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.				
20.		1, 1 1 (a)(1)				
21.		1, 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8				
22.		Certificate of Mailing by Express Mail				
23.						
		a.) Copy of international application as published (WO 01/23239) b.) PCT/IB/332 c.) PCT/IB/308 d.) PCT/IB/304				

AC15 Rec'd PCT/PTO 2 9 MAR 2002

U.S. APPLICATION NO. (IF KNOWN SELF 3700) 3 July Enational Application No. PCT/NO00/00319				ATTORNEY'S DOCKET NUMBER TPP 31444			
24. The fol	llowing fees are submitted:.		5			CALCULATION	S PTO USE ONLY
BASIC NATIONA	AL FEE ( 37 CFR 1.492 (a) (1) -	(5)):					
internationa	rnational preliminary examinatior l search fee (37 CFR 1.445(a)(2)) ional Search Report not prepared	paid to USPTO	•		\$1040.00		
☑ Internationa USPTO but	l preliminary examination fee (37 International Search Report prepare	CFR 1.482) not paid tared by the EPO or JPO	to O		\$890.00		
☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO							
but all claim	☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)						
☐ Internationa and all clain	Il preliminary examination fee (37 ns satisfied provisions of PCT Art	sicle $33(1)$ - $(4)$			\$100.00		
	ENTER APPROPRI	ATE BASIC FE	E AM	OUN	T =	\$890.00	
months from the ear	00 for furnishing the oath or declaritiest claimed priority date (37 Cl	FR 1.492 (e)).	☐ 20		⊠ 30	\$130.00	
CLAIMS	NUMBER FILED	NUMBER EXT	RA		RATE	4	_
Total claims	10 - 20 =	0		<u> </u>	\$18 00	\$0.00	
Independent claims	<u> </u>	0		Х	\$84.00	\$0.00	
Multiple Dependen	t Claims (check if applicable).	LABOUE CALC	NATA ACE		<u> </u>	. \$0.00	
		ABOVE CALC			S =	\$1,020.00	
✓ Applicant clai reduced by 1/2	ms small entity status. See 37 CF	R 1.27). The fees indic	ated abov	e are		\$510.00	
			SUB	ГОТ	AL =	\$510.00	
Processing fee of \$3 months from the ear	130.00 for furnishing the English rliest claimed priority date (37 Cl	translation later than FR 1.492 (f)).	□ 20	0	□ 30 +	\$0.00	
		TOTAL NAT	IONAI	LFE	E =	\$510.00	
Fee for recording the accompanied by an	Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).						
TOTAL FEES ENCLOSED =					\$510.00		
					Amount to be: refunded	\$	
						charged	\$
a. 🛛 A cl							
b. Please charge my Deposit Account No							
c. 🗵 The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment							
d.  Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card							
information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR							
1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  31674							
Thomas P. Pavelko, Esquire STEVENS, DAVIS, MILLER & MOSHER, L.L.P.  1615 L Street, N.W., Suite 850							
Washington, D.C.	•		for	The	omas P. Pa	velko	
Telephone: (202)	785-0100			NA	ME		· <del></del>
Facsimile: (202) 408-5200 or (202) 408-5088				31,689			
REGISTRATION				N NUMBER			
	March 29, 2002						
	DATE						
				DA	LE		

JC15 Rec'd PCT/PTO 2 9 MAR 2002

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Dag Harald SANDVIK et al

Attn: Applications

Serial No.: U.S. National Stage Application based on

International Application PCT/NO00/00319

filed 28 September 2000

Filed: March 29, 2002

For: DEVICE FOR CHILD SEAT IN A SHOPPER TROLLEY

### PRELIMINARY AMENDMENT

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Dear Sir:

Prior to calculation of the filing fee and examination on the merits, please amend the aboveidentified application as follows:

### **IN THE ABSTRACT**

Please substitute the attached one page Abstract for the one originally filed with the application (Attachment I).

### IN THE CLAIMS

Please amend claim 9 as follows. A marked-up copy of the amended claim is enclosed (Attachment II).

9. (Amended) A device according to claim 7, characterized in that in the area of each pair (38a,38a' and 38b,38b') of racks the slide (30) has two parallel projections (42a, 42a', 42b, 42b') to be engaged in one rack each, and that the notches each have a length essentially corresponding to the corresponding width of the intermediate guide groove (44, 48), again

corresponding to the distance of displacement of the slide (30) perpendicularly to the longitudinal direction of the racks.

Please add new claim 10 as follows:

٤

Ì

(New) A device according to claim 8, characterized in that in the area of each pair 10. (38a,38a' and 38b,38b') of racks the slide (30) has two parallel projections (42a, 42a', 42b, 42b') to be engaged in one rack each, and that the notches each have a length essentially corresponding to the corresponding width of the intermediate guide groove (44, 48), again corresponding to the distance of displacement of the slide (30) perpendicularly to the longitudinal direction of the racks.

### **REMARKS**

The purpose of the forgoing Amendment is to submit the Abstract on a single separate sheet and to delete multiple dependent claims, placing the application in better form for examination under U.S. practice. No new matter is entered.

Respectfully submitted,

TPP/mat

Attorney Docket No.: TPP 31444

Registration No. 31,689

STEVENS, DAVIS, MILLER & MOSHER, L.L.P.

1615 L Street, N.W., Suite 850

Washington, D.C. 20036

Telephone: (202) 785-0100

Facsimile: (202) 408-5200 or (202) 408-5088

Date: March 29, 2002

ATTACHMENT I

Y Y

### **ABSTRACT**

A safety device in connection with a child seat in a shopper trolley. The safety device prevents a child, placed on the seat (22) from being able to pull its legs out of the openings formed through the end wall (10) of the shopper trolley. The child seat (22) is pivotally suspended from the end wall (10), which can preferably be swung inwards/upwards in the shopper trolley about a horizontal axis, when shopper trolleys are being stacked horizontally. The child seat (22) is placed adjacent to the through opening (14', 14") for the child's legs. At their bottoms and sides the openings are defined by elements (10', 10", 16', 16", 20) included in the end wall (10). To the openings (14', 14") for the child's legals through the end wall (10) there is arranged an above-lying safety element (24), adjustable heightways, which is included in the safety device, and can restrict the openings (14', 14") when being lowered, after the child's legs have been put through the openings (14', 14") and are outside the shopper trolley, to the rear of the end wall (10). The stationary part (28) of the height-adjusting device of the safety element (24) may carry, at its top, an angled or bent plate-like support (52), known in itself, for information/advertisements etc.

### ATTACHMENT II

9. A device according to [any one of the preceding claims] <u>claim 7</u>, characterized in that in the area of each pair (38a,38a' and 38b,38b') of racks the slide (30) has two parallel projections (42a, 42a', 42b, 42b') to be engaged in one rack each, and that the notches each have a length essentially corresponding to the corresponding width of the intermediate guide groove (44, 48), again corresponding to the distance of displacement of the slide (30) perpendicularly to the longitudinal direction of the racks.

WO 01/23239

15

6/PRTS-

10089306

PCT/NO00/00319

JC15 Pac'd PCT/PTO 29 MAR 2002

#### DEVICE FOR CHILD SEAT IN A SHOPPER TROLLEY

This invention relates to a device for the child seat in a shopper trolley, where the child seat is pivotally supported in the area of the handle bar of the trolley, so that the openings through the adjacent end piece form passages for the child's legs when the child seat has been pivoted into the trolley, into an approximately horizontal position, the shopper trolley preferably being of the type, which can be inserted partially into other shopper trolleys through an end wall, which can be swung up, to allow stacking in the horizontal direction.

Child seats of the kind in question are not safe, since, by turning itself, the child can easily bring one foot up on the seat, from where it is easy to get up into a standing position, or the child can remain lying on its knees on the seat. Such situations may easily result in the child falling to the floor. Fatal accidents and serious accidents resulting in permanent injuries have happened, caused by falls from the child seat of the shopper trolley.

15

25

The passages through the end piece of the shopper trolley nearest to the push handle bar/cross-bar cannot be restricted as such, because this would make it difficult, possibly impossible, to place a child's legs through the openings. Therefore, these permanent passages should be wide and spacious insertion openings, which the child's legs can easily be put through and pulled out of later.

According to the present invention there has therefore been provided a safety device in the form of a transversal body adjustable heightways, which is lowered, when the child's legs have been put through the passage openings of the end piece of the shopper trolley, from an upper idle stand-by position to a lower active securing position, wherein the safety body restricts the passage openings for the child's legs heightways from the top. When this safety body is in one active lower securing position, this position may correspond to one of a number of different height positions depending on the thickness of the child's thighs. The safety body can thus be adjusted heightways and be fixed at the level set.

According to a particularly advantageous embodiment of the invention, the frame for the support of the safety bar has a plate-like holder at the top, which may be bent into shape from transparent plastic material, for example. In its active position, i.e. when the shopper trolley is not in the stacked position, the upper surface of this plate-like holder element will face the person pushing the shopper trolley, and in a known manner the holder may contain information and/or advertisement and be provided with a clamp for the temporary fastening of a shopping list.

4

30 This information carrier may alternatively be directly

15

20

25

30

connected to the inwards/upwards pivotal end wall of the shopper trolley, and may be angled so at its top that its plate-shaped main element (the information-carrying part), sloping downwards/rearwards in the position of use, comes to rest, as the end wall is pivoted inwards/upwards, on or above the transversal handle.

The safety element, which may have a shape resembling a clothes' hanger, which can be adjusted heightways and can be fixed at different levels, may with advantage be secured to a vertically displaceable slide, which can be fixed in different positions of height, and which may have one or more projections or similar engagement means releasably engaging at least one rack oriented vertically, which engagement can be temporarily released when the slide with the safety element is moved upwards or downwards for the purpose of height adjustment. The slide with the safety element and the projection/projections/engagement means are preferably biased towards a position in order to establish and maintain the engagement of the rack(s) in the height position set, preferably by means of a helical spring inserted between the slide and a counter means, which is immovable in the cushioning directions (axial direction) of the spring, but displaceable upwards and downwards in the directions of displacement of the slide, said helical spring extending perpendicularly to the longitudinal direction of the rack(s). By subjecting the slide with the safety element to a pressure force centrally, directed opposite the back-springing direction of the helical spring, and in the axial direction of the spring, the spring is compressed and tightened, while at the same time the one or more protrusions of the slide are disengaged sideways from the respective tooth notch or notches of the rack(s), whereby at least one projection lands

in a vertical guide groove.

With the projection of the slide gliding displaceably in the guide groove, the slide with the safety element may be displaced up or down, with the slide in the condition pushed in against the action of the compression spring, until the wanted height position of the safety element is reached.

The effective height position of the safety element will normally depend on the thickness of the child's thighs. When the child is to be removed from the child seat, the slide with the safety element is pressed in against the action of the compression spring, so that said projection is brought out of engagement from a rack notch of the respective rack(s) and lands in the vertical guide groove, in order for the slide with the safety element to be pushed upwards into an idle stand-by position.

Further objects, advantages and features of the invention will appear from the following description of a non-limiting example of a preferred embodiment, which is illustrated in the accompanying drawings, in which:

- Fig. 1 shows a perspective view of a shopper trolley, in which the safety bar is shown, drawn in full lines, in its upper idle stand-by position, and in dotted lines, in one lower, active position;
- Fig. 2 shows, in perspective, three stackable shopper trolleys, stacked partly into one another in the horizontal direction;

Fig. 3 shows a partial perspective view of a shopper trolley, in which the "basket" of the shopper trolley is highly simplified;

Fig. 4 shows a front view of the safety device separately, the transversal safety element having rounded, downward end portions;

Fig. 5, 5A and 6, 6A show partial perspective views and illustrate, seen at an angle from above, a simple height-adjusting device for the safety element (not shown),

Fig. 5 showing the projections of the slide, carrying the safety element, engaged in stationary vertical racks, which fix the position of the safety element, and have an intermediate guide groove for glidably receiving the projections of the slide carrying the safety element, for the displacement of the safety element heightways;

Fig. 5A being a cross-section along the line V - V in Fig. 5;

Fig. 6 corresponds to Fig. 5 in all essentials, but here the projections of the slide have been disengaged from the notches of the vertical racks, one of the visible projections thereby being positioned in the vertical guide groove located between the two racks forming a pair of racks, in order for the slide to be moved up or down relative to the position shown in Fig. 6; and

-

Fig. 6A is a section along the line VI - VI in Fig. 6.

25 Reference is made to Figs. 1 - 3, in which the shopper

30

trolley shown has an end wall 10 at a transversal handle bar 12. As appears more clearly from Fig. 3, the end wall 10 comprises two middle elements 10', 10", essentially vertical, rod-shaped or tubular, each defining, together with an adjacent element 16', 16" parallel therewith, near the side walls of the shopper trolley, represented by elements 18', 18", and a horizontal element 20 included in the end wall 10, a through opening 14' and 14" for the insertion of a child's leg.

In connection with these through insertion openings 14' and 14" for a child's legs, there is pivotally suspended from the end wall 10 and a frame 23 movable relatively thereto, see in particular Fig. 1, a known child seat 22, which has an essentially horizontal position in its active position, as shown, and an essentially vertical idle position, not shown, when the frame 23 is pivoted to the end wall 10. The pivotal suspension of this child seat 22 is well known and therefore not shown in detail.

At its upper edge, the end wall 10 is pivotally supported on a horizontal axis (suggested through the longitudinal axis A-A of the transversal rod 21 in Fig. 1), so that it may swing up when shopper trolleys are being stacked, inserted partially one into the other horizontally, Fig. 2. By the preceding pivoting of the frame 23 towards the end wall 10, the child seat 22 is pivoted into its idle position parallel to the frame 23 and the end wall 10, so that it does not interfere with the stacking.

Centrally in the upper portion of the end wall in question there is arranged, in accordance with the present invention, a child-securing device 24, which shall cooperate, in

15

25

principle, in an opening-restricting manner with the transversal element 20 of the end wall 10 in order to restrict these through openings 14', 14" after the child has put its legs through the openings, and is safely seated on the seat 22.

The active element 24 of the child-securing device is bar shaped and extends essentially parallel with the end wall of the shopper trolley, and has downward end portions 24', 24", each joining the transversal main body at a transition portion rounded convexly upwards/outwards.

The bar-shaped safety element 24 is suspended from the upper portion of the end wall 10, for example from the transversal rod 21.

To the middle rod-shaped/tubular elements 10', 10" of the end wall, the stationary part 28 of the height-adjusting device of the safety element 24 is rigidly secured.

To the top of the frame tubes or similar of the shopper trolley, centrally at the end wall, there is attached, in a manner not shown in further detail, a depending narrow oblong plate 26.

This stationary part 28 of the height-adjusting device for the safety element 24 cooperates with the vertically displaceable element of the height-adjusting device, which carries the safety element, and which can be fixed in the set, adjusted height, and has the form of a slide 30 in the shape of a right-angled U, viewed horizontally.

15

20

25

The reference numeral 32 identifies a securing head for the safety element 24, 34 identifying an operating knob arranged in a central hole 32' in the securing head 32.

Fig. 4 shows that the stationary part 28 of the height-adjusting device 28, 30 of the safety element has racks 38a, 38b facing in opposite directions. From Figs. 5, 5A and 6, 6A it appears that each of these racks comprises a pair 38a, 38a' and 38b, 38b' of racks.

The operating knob 34 of the head 32 of the safety element is connected to one end of a compression spring in the form of a helical spring 40 arranged centrally, whose other end is secured centrally in a bowl-shaped slide piece 41 with securing means in the form of two sleeves 41' with internal threads for the reception of screws (not shown), which are screwed into the sleeves 41' through holes 32'' in the securing head 32, so that the parts 32 and 41 are immovable perpendicularly to the length of the tubes 10', 10'' of the end wall, but can be displaced along said length, so that said bowl-shaped slide piece 41 will form a counter element for the spring 40 by its compression, as a consequence of the pushing in of the operating knob 34.

From Figs. 4, 5, 5A, 6, 6A it will appear that the slide 30 is provided with four projections 42a, 42a' and 42b, 42b', facing each other in pairs, engaging respective notches of the racks 38a, 38a', 38b, 38b' in the fixed height position of the safety element 24, Figs. 4 and 5,.

By the pushing in of the operating knob 34 of the safety element 24 in the central hole 32' of the securing head 32 for the compression and tightening of the spring 40, whereby

20

the glide piece 41 of the spring 40 works as a counter element, thereby allowing the compression of the spring 40, the projections 42a, 42a', 42b, 42b' of the slide 30 are brought out of engagement from the notches of the racks 38a, 38a', 38b, 38b', Figs. 5A, 6 and 6A, whereby the slide piece 41 of the compression spring 40 together with the securing head 32 and the slide 30 can be displaced heightways up or down.

The push-in direction of the operating knob 34 is suggested
by B in Fig. 5A. The push-in depth essentially corresponds to
the width of one tooth or a projection 42a, 42a', 42b',
which appears from Figs. 5A and 6A seen together.

According to Figs. 5 and 6, the part 28 of the heightadjusting and fixing device 28,30 of the safety element 24,
which is stationary in the connected position of use, is
formed like a U-clamp, i.e. with an elongate cross-section
squeezed flat horizontally, which has an insertion opening 44
between the vertical racks 38a, 38a', from where a slot 46
extends vertically through and across most of the horizontal
dimension of the part 28, ending in a rounded inner portion
46'. Such a part 28, shaped like a U-clamp, may be slipped
over/clamped onto the two middle rod-shaped or tubular
elements 10', 10" of the shopper trolley end wall 10, and be
secured thereto.

Between the racks 38b and 38b' of the pair 38b,38' of racks, there is formed a vertical guide groove 48 for one projection 42b' of the slide 30, whereas the second projection 42b slides, bearing externally on the rack 38b, when the slide 30 with the safety element 24 is displaced up or down, and the spring 40 is compressed. In their secured position in the

position of use, the racks 38a and 38a' of the pair 38a,38a' of racks will enclose a corresponding vertical guide groove formed by the insertion opening 44.

The safety element 24 shaped like a clothes hanger with two arms 24', 24" of a downward concave shape, will essentially come to bear lightly on the child's thighs, so that the child cannot get up when the safety element 24 has been set in the correct position heightways.

The upper end of said upper plate 26 is connected to a support element 50 attached round the upper rod-shaped/tubular element 21 of the end wall 10 of the shopper trolley. The support element 50 carries a so-called information carrier 52 for advertisements etc., whose effective face 52' is oriented in a slope from its top downwards, rearwards, i.e. towards the person pushing the shopper trolley in front of himself/herself, so that he/she can easily see the information, advertisement etc., without having to look away from the child sitting on the seat 22, secured with the safety element 24 across its thighs, Fig. 3.

- Fig. 2 shows three shopper trolleys pushed partially into one another, provided with safety elements 24 with height-adjusting and fixing device and information-carrier 52 which are pivoted together with the end wall 10 when this is influenced by another trolley being pushed in.
- The plate-shaped main element 52' of the information carrier 52, extending downwards/rearwards from its top, forms a free, outer part of an angled or bent plate body consisting of three or four plate-shaped portions arranged at such angles relative to one another, that when the end wall 10 swings

up/in as the shopper trolleys are being stacked in a horizontal row, Fig. 2, the plate-shaped main element 52' of the information-carrier 52, comes from above to rest in front of the transversal handle 12. Such information-carriers 52 can be connected directly or indirectly to the pivotal end wall 10 of the shopper trolley through the safety device.

The invention is not limited to the particular heightadjusting/fixing device shown for the safety bar 24, as other
interlockable/releasable, displaceable or telescopic devices
may be used, wherein the securing of the individual positions
can be stepped or infinitely variable. A safety bar 24, with
a spring or a telescopic cylinder arranged thereto, exerting
a constant light pressure across the child's thighs, can also
be used.

15

### Claims

- A device for a child seat in a shopper trolley, wherein 1. the child seat (22) is suspended from one side wall (10), which can preferably be swung into/up in the shopper trolley about an upper horizontal axis, when shopper trolleys are being stacked horizontally, and wherein the child seat (22) is placed adjacent to openings (14', 14") for the child's legs through said end wall (10), said openings (14', 14") being defined at the bottom and at the sides by elements (10',  $10^{\circ}$ , 16', 16", 20) included in said end wall (10), characterized in that in the area of said openings (14', 14") through the side wall (10) for the child's legs, the child seat (22) has an over-lying safety element (24) arranged thereto, which is adjustable heightways and can preferably be fixed in the set height position, and which is arranged to restrict the openings (14', 14") when lowered.
- 2. A device according to claim 1, c h a r a c t e r i z e d
  in that said safety element (24), which can be
  adjusted heightways and preferably be fixed/locked at
  the level set, has a shape resembling a clothes hanger
  consisting of a middle main body (24) essentially
  transversal, which merges through downward concave
  intermediate portions into downward end portions
  (24', 24").
  - 3. A device according to claim 1, wherein the trolley is provided with a plate-like information-carrier (52), characterized in that the plate-like

information-carrier (52), which is connected directly or indirectly to the pivotal end wall (10) of the shopper trolley, and which comprises in the position of use a main element (52') sloping from its top rearwards, and from the upper edge thereof, a plate section sloping forward and being connected to the carrying section, configured and positioned in such a manner that the angled upper part of the information carrier (52), consisting of said main element (52') and the plate section, is pivoted so, as the end wall (10) pivots when two or more shopper trolleys are being stacked into a horizontal row, that said plate-like main element (52') comes from above to rest on or above the transversal handle (12).

- 15 4. A device according to claim 3, c h a r a c t e r i z e d i n that at its top the stationary part (28,26) of the height-adjusting/fixing device (28,26,30) of the safety element (24) is connected to the lower supporting part of said information-carrier (52).
- A device according to claim 3, characterized 5. 20 that the stationary part (28,26) of the heightadjusting and fixing device (28,26,30) of the safety element (24) comprises at least an essentially vertical rack (38a, 38a', 38b, 38b'), and that the safety element (24) is connected to a slide, carriage or similar (30) 25 displaceable in the vertical direction between an upper, idle stand-by position, in which the safety element (24) does not restrict said through openings (14', 14") for the legs heightways, and several active positions below, these position depending on the thickness of the child's 30 thighs, said slide (30) being formed with at least one

-

15

20

25

30

14

projection (42a, 42a', 42b, 42b'), arranged to engage, in one position of the slide/safety element in the longitudinal direction of the shopper trolley, a notch of said at least one rack (38a, 38a', 38b, 38b'), whereas in another position of the slide/safety element in the longitudinal direction of the shopper trolley, it is pushed sideways out of said engagement, whereby nothing prevents the slide/safety element (30/24) from being displaced up or down essentially in the vertical direction.

- 6. A device according to claim 5, c h a r a c t e r i z e d i n that the slide (30) with the safety element (24) is spring-biased (40) towards their non-displaceable position, in which the projections (42a, 42a', 42b, 42b') of the slide (30) are engaged in a notch (notches) of said rack(s) (38a, 38a', 38b, 38b').
- 7. A device according to claim 6, c h a r a c t e r i z e d in that in the area of said rack, there is arranged a pair (38b, 38b') of racks with an intermediate guide groove (48) for one projection (42b') of the slide (30), and that the slide (30) with the safety element (24) cooperates with a spring (40), which seeks to retain the slide (30) in a position conditioned by the projection (42a, 42a', 42b, 42b') thereof being engaged in a notch of the racks (38a, 38a', 38b, 38b').
- 8. A device according to claim 7, c h a r a c t e r i z e d i n that the stationary part (28) of the height-adjusting/fixing device of the safety element (24), carrying the racks (38a, 38a', 38b, 38b'), is formed like a U-shaped clamp with a horizontally elongate

15

vertical slot (46) therethrough, which extends over more than half the width (horizontal extent) of the U-clamp (28), it being possible for said U-clamp (28) to be passed over/clamped onto the end wall elements (10', 10") of the shopper trolley.

9. A device according to any one of the preceding claims 7 and 8, c h a r a c t e r i z e d i n that in the area of each pair (38a,38a' and 38b,38b') of racks the slide (30) has two parallel projections (42a, 42a', 42b, 42b') to be engaged in one rack each, and that the notches each have a length essentially corresponding to the corresponding width of the intermediate guide groove (44, 48), again corresponding to the distance of displacement of the slide (30) perpendicularly to the longitudinal direction of the racks.





### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau





# (43) International Publication Date 5 April 2001 (05.04.2001)

### **PCT**

# (10) International Publication Number WO 01/23239 A1

(51) International Patent Classification7:

B62B 3/14

- (21) International Application Number: PCT/NO00/00319
- (22) International Filing Date:

28 September 2000 (28.09.2000)

(25) Filing Language:

Norwegian

(26) Publication Language:

English

(30) Priority Data: 19994728

29 September 1999 (29.09.1999) NO

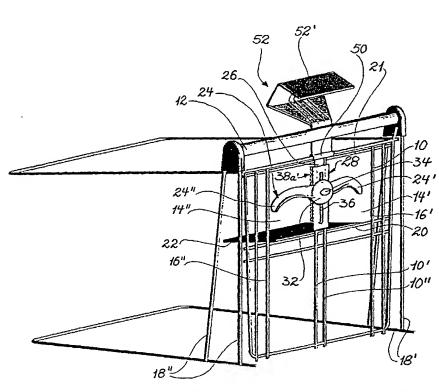
- (71) Applicants and
- (72) Inventors: SANDVIK, Dag, Harald [NO/NO]; Trollvik, N-9300 Finnsnes (NO). CRUICKSHANK, Arve [NO/NO]; Trollvik, N-9300 Finnsnes (NO).
- (74) Agents: HÅMSØ, Eivind et al.; Håmsø Patentbyrå ANS, P.O. Box 171, N-4302 Sandnes (NO).
- (81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### Published:

With international search report.

[Continued on next page]

### (54) Title: DEVICE FOR CHILD SEAT IN A SHOPPER TROLLEY

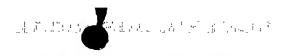


(57) Abstract: A safety device in connection with a child seat in a shopper trolley. The safety device prevents a child, placed on the seat (22), from being able to pull its legs out of the openings formed through the end wall (10) of the shopper trolley. The child seat (22) is pivotally suspended from the end wall (10), which can preferably be swung inwards/upwards in the shopper trolley about a horizontal axis, when shopper trolleys are being stacked horizontally. The child seat (22) is placed adjacent to said through openings (14', 14") for the child's legs. At their bottoms and sides the openings are defined by elements (10', 10", 16', 16", 20) included in said end wall (10). To said openings (14', 14") for the child's legs through the end wall (10) there is arranged an above-lying safety element (24), adjustable heightways, which is included in said safety device, and can restrict said openings (14', 14") when being lowered, after the child's legs have been put through

said openings (14', 14'') and are outside the shopper trolley, to the rear of said end wall (10). The stationary part (28) of the height-adjusting device of the safety element (24) may carry, at its top, an angled or bent plate-like support (52), known in itself, for information/advertisements etc.

01/2324 A





### WO 01/23239 A1

A LUCADO DE PROPRIO DE

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

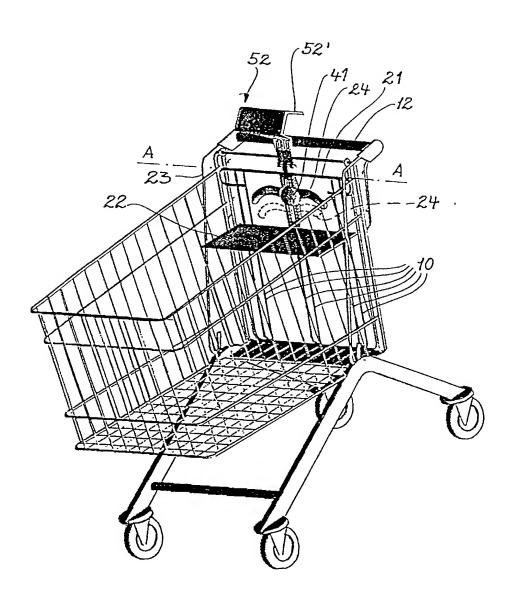
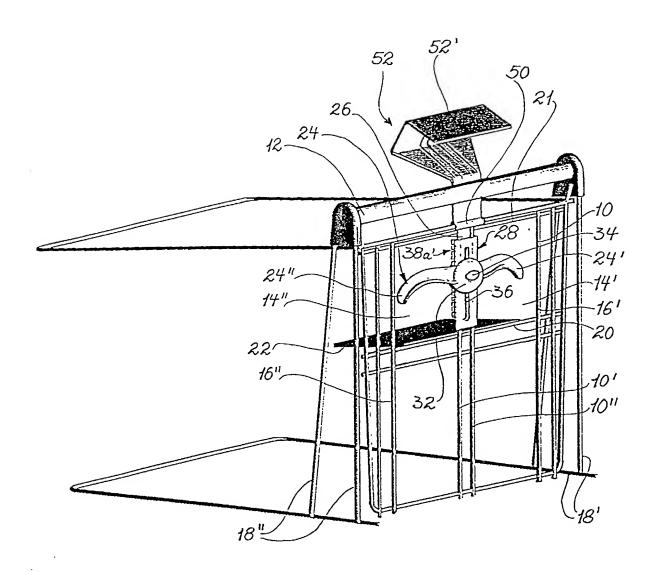


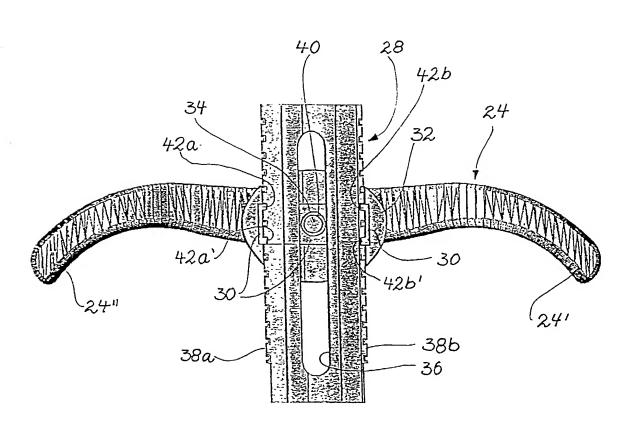
FIG. 1



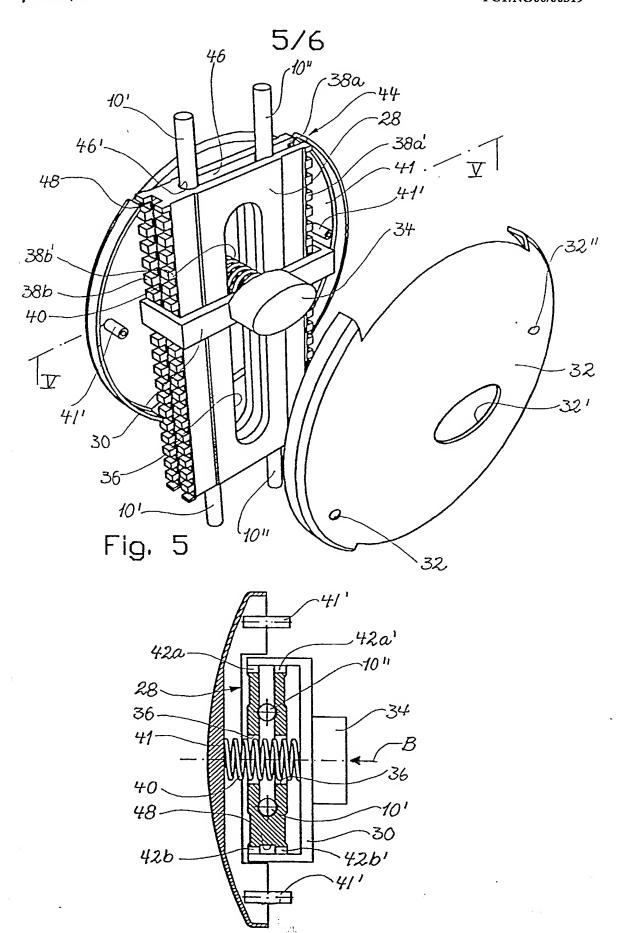
FIG.2

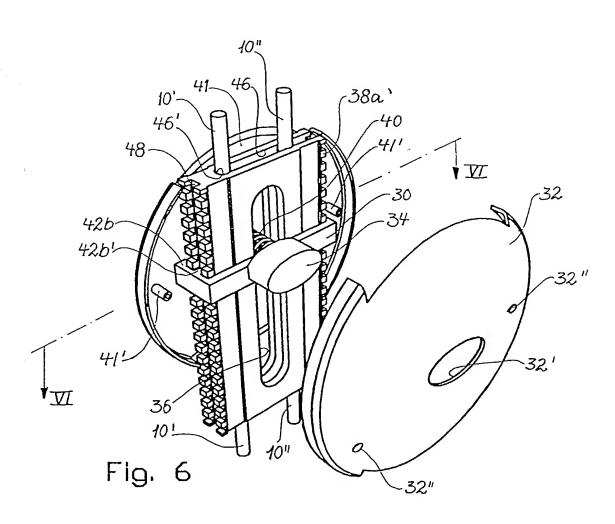


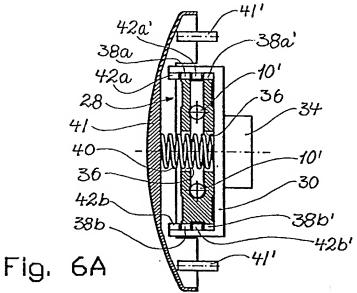
F1G. 3



F1G.4







COMBINED DECLARATION AND POWER OF ATTORNEY FOR UTILITY PATENT APPLICATION (Includes PCT)

Attorney Docket No. TPP 31444

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; that

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

#### DEVICE FOR CHILD SEAT IN A SHOPPER TROLLEY

the specification of which (check one)

- [ ] is attached hereto.
- [] was filed on \_\_\_\_\_ as Application Serial No.\_\_\_\_ and was amended on \_\_\_\_\_. (if applicable)
- [X] was filed as PCT International Application No. <u>PCT/NO00/00319</u> on <u>28 September 2000</u>, and was filed in the U.S. National Stage on \_\_\_\_ as U.S. Patent Application No. \_\_\_\_.

I.hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I do not know and do not believe the claimed invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

I hereby claim foreign priority benefits under Title 35, United States Code §119 and/or §365(a)(b) of any foreign application(s) and United States provisional applications for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application(s) on which priority is claimed:

Prior Foreign and U.S. Provisional Application(s) Pr

Priority Claimed

19994728	(Country)	29 September 1999	[X]	[]
(Number)		Day/Month/Year Filed	Yes	No
(Number)	(Country)	Day/Month/Year Filed	[ ] Yes	[]

### Attorney Docket No. TPP 31444

I hereby claim the benefit under Title 35, United States Code, §120 and/or §365(c) of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

		Status (patented,	pending,	abandoned)
ication Serial No. 1	iling Date	Status (patented,	pending,	abandoned)
		(patented,	pending,	

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith; Stevens, Davis, Miller & Mosher, L.L.P.; Anthony P. Venturino, Reg. No. 31,674; James E. Ledbetter, Reg. No. 28,732; Thomas P. Pavelko, Reg. No. 31,689; and Peter N. Lalos, Reg. No. 19,789. Direct all telephone calls to telephone no. 202-785-0100 and faxes to 202-408-5200.

Address all correspondence to 1615 L Street, N.W., Suite 850, Washington, D.C. 20036.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

application or any patent issued thereon.					
)	Full Name of Sole, First Inventor Dag Harald SANDVIK	Inventor's Signature	Date 12.04.02		
	Residence: Finnsnes, Norway		Citizenship Norway		
	Post Office Address: Trollvik, N-9300 Finnsnes, Nor	way			

- 2 -

Full Name of Second, Joint Inventor Arve CRUICKSHANK	Inventor's Signature  Acre Ciccleste le	Date 12/4.02				
Residence: Finnsnes, Norway		Citizenship Norway				
Post Office Address: Trollvik, N-9300 Finnsnes, Norway						
Full Name of Third, Joint Inventor	Inventor's Signature	Date				
Residence:		Citizenship				
Post Office Address:						